

Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A removable printhead assembly for a printer which prints onto a moving web, comprising:
 - a full width stationary printhead with an elongate casing;
 - ~~located on a rail mounted within the printer, the elongate casing and the rail having complementary external~~
features extending longitudinally along each such that inserting the printhead into the printer requires an end of
the elongate casing to engage an end of the rail via the complementary external features in order to slide along
the rail into operative position within the printer; along which it slides for service and removal;
 - a number of replaceable ink reservoirs ~~which mounted in the printer, the replaceable ink reservoirs being~~
configured to supply the printhead with different inks;
 - the printhead comprising a color printhead which is at least as wide as the web; and
 - the printhead being supplied with the different inks through tubes which can be disconnected so the printhead
may be removed by sliding longitudinally with respect to the rail until the complementary external features on
the rail and the elongate casing disengage.
2. (Original) The printhead assembly of claim 1, wherein:
 - the printhead is secured to the rail by fasteners which allow the printhead to be removed when the fasteners are disengaged.
3. (Withdrawn) The printhead assembly of claim 1, wherein:
 - the inks are contained in individual reservoirs and a sensor in each reservoir monitors a level which may be displayed to a user of the printer.
4. (Withdrawn) The printhead assembly of claim 1, further comprising:
 - an air supply which supplies a stream of air, through a supply tube, to a location near the printhead from where the stream impinges onto the web to prevent it from adhering to the printhead.

5. (Withdrawn) The printhead assembly of claim 1, further comprising:

a first coupling which disconnects the printhead from the ink reservoirs.

6. (Withdrawn) The printhead assembly of claim 1, wherein:

the printhead assembly further comprises a capping device having a capper motor for sealing the printhead with a moveable cap when not in use in order to prevent contamination from entering the printheads.

7. (Withdrawn) The printhead assembly of claim 6, wherein:

the capping device further comprises a blotter, which moves into and out of position and which is used for absorbing ink fired from the printhead.

8. (Original) The printhead assembly of claim 1, further comprising:

one or more rail microadjusters for accurately adjusting a gap between the printhead and the media onto which it is printing.

9. (Withdrawn) The printhead assembly of claim 4, further comprising:

a second coupling with which the air supply can be disconnected from the printhead.

10. (Withdrawn) The printhead assembly of claim 9, wherein:

the first coupling and the second coupling are formed together as a single unit.

11. (Withdrawn) The printhead assembly of claim 1, further comprising:

a pre-heater located beneath a path followed by the media;

the pre-heater located below the media and before the printhead.

12. (Withdrawn) The printhead assembly of claim 1, further comprising:

a dryer in the same path as the printer the dryer adapted to dry the ink deposited by the printer

13. (Withdrawn) The printhead assembly of claim 12, wherein:
the dryer has a compartment located beneath an opening;
the opening being essentially in the path;
there being a source of heated air located above the opening, the source of heated air adapted to blow heated air into the opening.

14. (Withdrawn) The printhead assembly of claim 13, wherein:
the opening is coverable by a door; and
the door covers the opening and acts to support the web when the door is closed.

15. (Withdrawn) The printhead assembly of claim 14, wherein:
the door pivots to reveal the opening.

16. (Withdrawn) The printhead assembly of claim 15, wherein:
the door is operated by a motor that operates a spool;
the spool winding and releasing a member which operates the door.

17. (Withdrawn) The printhead assembly of claim 14, wherein:
a preheater is located in the path and located before the opening.

18. (Withdrawn) The printhead assembly of claim 11, wherein:
the preheater is in the same plane as the door.

19. (Withdrawn) The printhead assembly of claim 13, wherein:
the source of heated air comprises a blower which feeds a stream of air into a plenum.

20. (Withdrawn) The printhead assembly of claim 19, wherein:
a temperature sensor is located in the plenum.

21. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the moving web is printed by the printhead at a rate exceeding 0.02 square meters per second (775 square feet per hour).

22. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the moving web is printed by the printhead at a rate exceeding 0.1 square meters per second (3875 square feet per hour).

23. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the moving web is printed by the printhead at a rate exceeding 0.2 square meters per second (7750 square feet per hour).

24. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printhead has more than 7680 nozzles.

25. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printhead has more than 20,000 nozzles.

26. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printhead has more than 100,000 nozzles.

27. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printhead has more than 250,000 nozzles.

28. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printhead prints ink drops with a volume of less than 5 picoliters.

29. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printhead prints ink drops with a volume of less than 3 picoliters.

30. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printhead prints ink drops with a volume of less than 1.5 picoliters.

31. (Original) A removable printhead assembly as claimed in claim 1 wherein the printer is a self contained printer for producing rolls of wallpaper, the printer comprising:
a cabinet in which is located a media path which extends from a media cartridge loading area to a winding area;

a full width digital color printhead located in the media path;

a processor which accepts operator inputs which are used to configure the printer for producing a particular roll; and

the winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer.

32. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printer is adapted for use with a media cartridge, the media cartridge comprising:

a case in which a roll of blank media may be deployed;

the case having two halves, hinged together, an area between the two halves, when closed, defining a media supply slot; and

the case having internally and adjacent to the slot, a pair of rollers, at least one of the rollers being a driven roller which is supported at each end, by the case, for rotation by an external motor.

33. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printer is adapted for producing rolls of wallpaper for being carried in a consumer tote, the tote comprising:

a disposable exterior in which is formed a main access flap and a pair of core access openings; and

the tote having an interior in which is located a disposable core which is aligned with the access openings.

34. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printer has a transverse cutter, the cutter comprising:

a chassis having end plates;

the end plates being separated to allow a web of media to pass between them;

the end plates supporting between them a cutting blade; and

the blade supported at each end to perform a cutting motion which begins on one side of the web and finishes on an opposite side of the web.

35. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printer has a slitting mechanism, the slitting mechanism comprising:

a chassis having end plates;

the end plates being separated by a transverse portion of the chassis to allow a web of media to pass between them;

one or more rotating slitting shafts extending between the end plates, each shaft having one or more slitters arranged along its length, each slitter having a cutting edge; and
the slitting mechanism selectively engageable to either enter or not enter a path followed by the web according to an input provided by an operator of the printer.

36. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printer has a dryer, the dryer comprising:

a compartment with a top opening for receiving a media web fed from the printer;

a source of heated air located above the top opening for blowing heated air into the opening to dry printing on the media web.

37. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printer is adapted to produce rolls of wallpaper, the printer comprising:

a cabinet in which is located a media path which extends from a media loading area to a winding area;

a printhead located in the media path;

a processor which accepts operator inputs from one or more input devices which are used to configure the printer for producing a particular roll; and

the winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer wherein,

the length and design of the roll are determined by the operator inputs.

38. (Withdrawn) A removable printhead assembly as claimed in claim 1 for use in a method of printing wallpaper onto a web of media, the method comprising the steps of:

utilizing an on-demand printer comprising a cabinet in which is located a media path which extends from a media loading area to a winding area, there being a printhead located in the media path, a processor which accepts operator inputs from one or more input devices;

using one or more input devices which communicate with the processor to capture data from an operator regarding a specification for an operator's requirements;

using the processor to operatively control the printer according to the data; and

printing a single roll of wallpaper, on demand, according to a selected pattern.

39. (Withdrawn) A removable printhead assembly as claimed in claim 1 for use in a method of operating a wallpaper printing business, the method comprising the steps of:

utilizing an on-demand printer comprising a cabinet in which is located a media path which extends from a media loading area to a printhead and from the printhead to a dispensing slot;

using one or more printer input devices which communicate with a processor to capture data regarding one or more customer's requirements;

the data comprising at least a customer selected pattern;

printing a roll of wallpaper, onto a web of blank media, on demand, according to the selected pattern; and

charging a customer for the roll.

40. (Withdrawn) A removable printhead assembly as claimed in claim 1 for use in a method of operating a wallpaper printing franchise, the method comprising the steps of:

providing to franchisees, an on-demand printer comprising a cabinet in which is located a media path which extends from a media loading area to a printhead and from the printhead to a dispensing slot;

the printer having one or more printer input devices which communicate with a processor to capture data regarding one or more customer requirements, the data comprising at least a customer selected pattern;

providing the franchisee with a collection of patterns in a digital storage medium that can be read by the printer;

enabling the franchisee to print a roll of wallpaper, onto a web of blank media, on demand, according to the selected pattern; and

obtaining or attempting to obtain a fee from the franchisee.

41. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printer is adapted to produce rolls of wallpaper, the printer comprising:

a frame in which is located a media path which extends from a media loading area to a winding area;

a printhead located across the media path;

one or more input devices for capturing operator instructions;

a processor which accepts operator inputs which are used to configure the printer for producing a particular roll; and

the winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer.

42. (Withdrawn) A removable printhead assembly as claimed in claim 1 for use in a method of printing wallpaper onto a web of media, the method comprising the steps of:

utilizing an on-demand printer comprising a cabinet in which is located a media path, there being a full width printhead located across the media path, there being a processor which accepts operator inputs from one or more input devices and which controls the printer;

using one or more input devices which communicate with the processor to capture data from an operator regarding a specification;

running the printer according to the data;

printing a single roll of wallpaper, on demand, according to a selected pattern and configuration;

changing the pattern according to a new datum from an operator; and

then printing a new roll onto the same web.

43. (Withdrawn) A removable printhead assembly as claimed in claim 1 for use in a method of drying a moving web of media in a printer such as a wallpaper printer, the method comprising the steps of:

loading the web in a path that traverses a compartment in a dryer within the printer, the compartment having an opening across the top;

allowing the moving web to descend into the compartment, as required; and

blowing heated air from above the opening.

44. (Withdrawn) A removable printhead assembly as claimed in claim 1 for use in a method of supplying a media web to a wallpaper printer, the method comprising the steps of:

opening a reusable case;

placing into the case a core onto which has been located a supply roll of blank wallpaper media;

supporting the core for rotation within the case;

leading a free edge of the roll between a pair of rollers and past an edge of the open case; then

with the rollers located within the case and on either side of the web, closing the case and loading it into a printer.

45. (Withdrawn) A removable printhead assembly as claimed in claim 1, the assembly further comprising:
a full width printhead located across the path;
the printhead comprising a color printhead which is at least as wide as the web;
the printhead being supplied with a number of different inks which are remote from the printhead and which supply the printhead through tubes.

46. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printer is adapted to produce rolls of wallpaper, the printer comprising:
a housing in which is located a media path which extends from a blank media intake to a wallpaper exit slot;
a multi-color roll width removable printhead located in the housing and across the media path;
the printhead being supplied by separate ink reservoirs, the reservoirs connected to the printhead by a an ink supply harness, there being a disconnect coupling between the reservoirs and the printhead;
one or more input devices for capturing operator instructions;
a processor which accepts operator inputs which are used to configure the printer for producing a particular roll.

47. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printer is adapted to produce rolls of wallpaper that can be carried in a consumer tote, the tote comprising:
a disposable exterior in which is formed a main access flap and a pair of core access openings;
the tote having an interior in which is located a disposable core which is aligned with the access openings;
both openings exposing a moulded coupling, one coupling attached to each end of the core, at least one of the couplings being a driven coupling and adapted to engage a driving spindle that rotates the core.

48. (Withdrawn) A removable printhead assembly as claimed in claim 1 wherein the printer is self threading and adapted to produce rolls of wallpaper, comprising:
a media loading area adapted to support a media cartridge in a position so that a media supply slot of the cartridge is closely adjacent to a pilot guide;
a cabinet housing a media path which extends from the pilot guide to a printed media dispensing slot;
a printhead located across the media path;
a processor which accepts operator inputs which are used to configure the printer for producing a particular roll;

a motor within the cabinet for advancing a media web out of the media cartridge; and
one or more other motors adapted to urge the media along the path and out of the slot.

49. (Withdrawn) A removable printhead assembly as claimed in claim 1 adapted for use in a method of producing wallpaper on-demand, the method comprising the steps of:
utilizing an on-demand printer comprising a cabinet in which is located a media path which passes a printhead on the way to a dispensing slot;
selecting a pattern and a configuration;
using one or more printer input devices which communicate with a processor to input the pattern and the configuration; and
printing a roll of wallpaper, onto a web of blank media, on demand, according to the selected pattern and configuration.